Software-Based Self-Reflection, Preservice Teaching Performance, and Pre-Conceived Recruitment Socialization Influences

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Abstract

The literature provides evidence and an understanding of the influence of the workplace on the induction year and beyond of physical education teachers. Prospective physical education teachers (recruits) enter teacher preparation programs with pre-conceived mental models of themselves in the teaching workforce. Few studies focus on the change process of teacher preparation programs and possible positive influences of the programs on possible prior inappropriate and ineffective beliefs of preservice teachers. In this study, researchers analyze the impact of a series of clinical teaching micro-lessons and the subsequent implementation of a software-based self-reflection program to improve recruits’ teaching performance. The study built on the authors’ previous research regarding specific influences that led recruits to physical education as a career choice and any relationship of prior expressed career choice influences to any changes in preconceived models after the software-based self-reflection program. Results indicate that the process of self-reflection using lesson films influences change in student learning proxy variables, demonstrating pre-lesson thinking, although not because of the software-based treatment. A relationship may exist between recruits’ life-long desire to teach physical education and decreasing the time students spend in cognitive behaviors. Although not congruent with the investigators’ expectations, the results indicate that a clinical teaching experience may influence physical education teaching recruits’ preconceived models once in the preparation program.
Software-Based Self-Reflection, Preservice Teaching Performance, and Influencing Pre-Conceived Recruitment Socialization Influences

Prospective teachers do not enter a teacher education program with a “blank slate” (Lawson, 1983; Lortie, 1975; Schempp & Graber, 1992), but often have preconceived ideas of how they plan to teach (Everhart & Everhart, 2010; Hutchinson, 1993; O’Bryant, O’Sullivan, & Raudensky, 2000). The majority of studies on socialization in physical education focus on the workplace and/or the induction year known as occupational socialization (Curtner-Smith, 1997, 1998, 2001, 2008; Curtner-Smith, Hastie, & Kinchin, 2008; Lawson, 1983; O’Sullivan, 1989; Stroot, Faucette, & Schwager, 1993; Stroot & Whipple, 2003). However, entry into teacher education programs and the preparation of preservice teachers play a role in shaping teachers prior to entering the workforce (Dodds, 1989; Graber, 1989; Lee & Curtner-Smith, 2011; O’Bryant, O’Sullivan, & Raudensky, 2000).

The influence of a preparation program is critical for reshaping teaching candidates from a custodial perspective to one that aligns teacher practice with best practices for PK-12 learning (Berliner, 1986; Griffey & Housner, 1991; Housner, 1985; O’Sullivan, 2003; Rink, 2003, 2009). Quality preparation includes mentoring and guidance of excellent cooperating teachers assigned to preservice teachers (Dodds, 2005) in early clinical teaching experiences and student teaching.

Other influences shape the model and practice of preservice physical education teachers upon entry into the workforce (O’Bryant, O’Sullivan, & Raudensky, 2000). One study reported that three recruits entering teaching with pre-conceived models maintained the pre-conceived beliefs about teaching throughout the preparation program (Doolittle, Dodds, & Placek, 1993) in spite of efforts by faculty to develop and deepen their beliefs. The researchers could not directly explain the teachers’ persistence of beliefs, but posited that dissonance among some faculty and recruits in the program may have influenced the recruits’ beliefs about teaching (Zeichner & Tabachnick, 1981).


Feedback on Teaching

Much of the time-mediating research in older studies demonstrate a link between student achievement and the teaching and learning process in physical education (Metzler, 1979; Silverman, 1985; Silverman, 1990; Silverman, Devillier, & Ramirez, 1991) and typically apply Academic Learning Time (ALT) as a proxy variable for learning (Silverman, 1985, 1990). Quality preservice clinical teaching experiences, with relevant feedback and reflection, positively influence preservice teachers. Feedback on teaching and learning through observations of lessons typically employ paper-based or
software-based observation instruments and include real-time variables in the form of duration and frequencies of occurrence of student and teacher behaviors.

The process-product research in physical education paints a picture depicting characteristics of effective and some experienced teachers. The characteristics and teaching behaviors differ from those common to novice teachers (Graham, Soares, & Harrington, 1983; Paese, 1986; Sharpe, Mavi, & Brown, 2002), and support the conclusions of Griffey and Housner (1991) on the effectiveness of experienced and novice teachers (Rink, 2003; Siedentop & Eldar, 1989). Griffey and Housner (1991) suggested that experienced teachers draw on past experiences to respond more quickly to student responses and practice attempts than do novice teachers. Teacher educators utilize systematic observation instruments typically comprised of teaching behaviors in lessons of effective teachers. Preservice teachers reflect on their lessons and teaching practices in an effort to improve as teacher educators implement the observation instruments and provide feedback in clinical teaching experiences.

Programs that require peer-teaching as one of the clinical experiences in physical education teacher education (PETE) are common in the United States. Some teacher education programs combine clinical experiences with feedback opportunities that include filming lessons or live assessments of teaching performance with appropriate software-based observation instruments. Feedback generated with the assistance of graduate students using a systematic observation instrument (WVUTES) (Hawkins, Wiegand, & Bahneman, 1983) improved subsequent lessons taught by the preservice teachers (Hawkins, Wiegand, & Landin, 1985; Landin, Hawkins, & Wiegand, 1986). More recently, researchers (Sharpe, 1997; Sharpe, Mavi, & Brown, 2002) studied the impact of a feedback and goal-setting protocol emphasizing sequential behavior analysis (SBA) on the daily practice changes of preservice teachers and their students.

Feedback also comes from other software-based self-assessments (Everhart & Turner, 1995; Everhart & Turner, 1996) or from software-based peer-assessments (Curtner-Smith, 1996). Curtner-Smith developed a Pedagogy Laboratory at the University of Alabama in 1991 and began requiring the use of the Physical Education Teacher Assessment Instrument (PETAI) (Phillips, et al., 1986) by student teachers as well as during early field experiences (EFE’s) (1996). The findings surrounding preservice teachers during EFE’s using the PETAI to aid in self-reflection support other research suggesting that clinical teaching opportunities are more effective if well-supervised and with appropriate reflection opportunities (Dodds, 2005).

Teacher educators and researchers often use cutting-edge technology to provide preservice teachers complex feedback during early clinical teaching experiences (Sharpe, 1997; Sharpe, Mavi, & Brown, 2002). Preservice teachers analyze their lessons for improvement during self-reflection sessions. Clinical teaching experiences with software-based feedback may reshape the recruits’ pre-conceived custodial models when entering preservice programs. Completion of an entire preparation program helps reshape recruits’ mental models and influences development of effective physical education teachers. Current software (Sharpe & Koperwas, 1999) may assist in self-reflection analyses of teaching and learning following early clinical teaching experiences. Following clinical
experiences and student teaching, feedback from teacher educators and software-based self-reflection may influence the recruits’ reshaping of the teaching model.

The purpose of this study was to determine the impact of a software-based self-assessment of teaching performance on selected student learning proxy variables of college students in peer-taught early clinical teaching lessons. Proxy variables take the place of real elements which are difficult to replicate such as actual learning variables substituted for by real time measures which indirectly show that learning has or has not occurred. A secondary purpose was to determine a relationship between the significant recruitment influence from previous findings (Everhart & Everhart, 2010) and lesson improvement during the early clinical teaching process in a course-based experience. Figure 1 represents recruitment themes from the questionnaire after the investigators tested for reliability and validity.

Methods

Procedures

Participants included preservice teachers (N=37) enrolled in a Teaching Games for Understanding course at a large southwestern United States university. Participants taught four micro-lessons to peers as part of the semester course requirements. Researchers obtained approval from the university’s Institutional Review Board, and obtained written informed consent from the participants prior to beginning the study. Participants utilized a large gymnasium space to teach three simultaneous lessons, videoing each of the lessons simultaneously. Following the micro-lesson instruction, participants viewed the lessons for self-reflection and goal-setting purposes in the Behavioral Pedagogy Laboratory. Researchers randomly divided participants into two treatment groups (described below). Participants taught 12-minute micro-lessons with an invasion game tactical focus. During the scheduled film analysis session in the laboratory, participants viewed their filmed micro-lessons, reflected on their teaching performances, and set goals for their next lessons.

Behavioral Pedagogy Laboratory Procedures

Upon initial entry into the lab, participants (N=37) from both treatment groups completed a questionnaire based on Hutchinson’s (1993) framework to determine types of influences that effected their career choices as physical education teachers. The questionnaire data focused solely on the relationship between recruitment influences into the teaching profession and completion of a multiple teaching clinical teaching experience (Everhart & Everhart, 2010). Findings indicated that pursuing a life-long dream to teach physical education was the only influence that remained strong following a clinical teaching experience (see Figure 1). This paper utilizes data from that study to determine the relationship of the recruitment influence of a life-long dream to teach physical education with gain scores following the two micro-lessons taught to peers.
To utilize data collected from teaching performances, participants completed the questionnaire and attended both laboratory reflection sessions. Researchers removed from the study any participants failing to complete one or more of the requirements. The original number of participants (N=37) dropped to 22 participants completing the required questionnaire and laboratory reflection sessions. The first group (Treatment 1; N=12) viewed the filmed lessons and used the Computer Observation System (COS) developed by Gaylor (1998) to record the duration and frequency of teacher and student behaviors. The COS enables participants to use a computer to click and record the total

**Figure 1.** Common Recruitment Themes (Hutchinson, 1993) Aligned with Questions Related to What Influenced Preservice Teachers to Major in Physical Education (Everhart & Everhart, 2010)

- A love of sports and/or physical activity influenced me to major in physical education
- The competitive nature of playing sports influenced me to major in physical education
- I want to use my sporting and activity experience/knowledge to help youth
- A former teacher influenced me to become a physical education teacher
- A former coach influenced me to become a physical education teacher
- In order for me to coach, I need to have a teaching position
- Someone else influenced me to teach physical education
- I want to teach physical education because I respect quality physical education instruction
- I have wanted to teach physical education for a long time (significant at .05 level)
- I believe physical education teachers should keep the community informed on what goes on in physical education class.
number of seconds a behavioral event occurs in their lessons. When a new behavioral event occurs, the participants click the mouse again to stop the time on the previous event and record the duration in seconds for the next behavioral event. This system created a report on the percent of micro-lesson time their peer students engaged in the different student behaviors. After printing the software-generated results on their own lessons, Treatment 1 participants (N=12) used the data to reflect on questions provided to them in written form by the supervisor of the Behavioral Pedagogy Laboratory and to set goals for improving the next micro-lessons. The second group (Treatment 2; N = 10) viewed the film of their own lessons, simply reflected on the lessons while watching, completed the same written questions, and set goals for the next micro-lesson, a process similar to the Treatment 1 group.

**Data Collection**

A co-investigator, the supervisor of the Behavioral Pedagogy Laboratory, utilized the Behavioral Evaluation Strategy & Taxonomy (BEST) (Sharpe & Koperwas, 1999) to view and analyze participants’ complex teaching and learning patterns in every micro-lesson. The investigators configured BEST to use a modified version of ALT-PE and the West Virginia University Teacher Evaluation System (WVUTES), focusing on a blend of student behavior variables from the two observation instruments. The variables configured into BEST included student engaged activity time, student cognitive time, student waiting time, student management time, and student interim time. Figure 2 provides the definitions of these variables and corresponding keyboard keys.

**Figure 2.** Keyboard Configuration and Definitions of the Systematic Observation System Used in BEST for Collecting Data on Student Behaviors for This Research Study
Interim time is student non-instructional action that occurring within an ongoing subject-matter motor task, differing from student management time, a student non-instructional action occurring outside of a subject-matter motor task. An interim action example is retrieving a ball that goes out of bounds during a game or an errant pass from a partner during a passing drill. The events occur during an on-going subject-matter motor task. An example of management time is a student moving from one completed station to the next station to begin the next task or retrieving a jersey to identify teams as he moves to the next court to begin a modified game about to start.

The co-investigator viewed each film of the first two invasion game lessons (of both treatment groups) and recorded behaviors associated with the study to correlating indicators on the keyboard. BEST allows an observer to record frequencies and durations of events.

**Inter-Observer Agreement (IOA)**

The co-investigator established inter-observer agreement (IOA) by viewing a previously prepared lesson film that included three two-minute lesson segments. While viewing the three two-minute segments consecutively, without stopping between segments and recording behaviors, the co-investigator utilized the configured instrument within BEST to agree closely with previously established expert observations. The co-investigator used the observation instrument to compare results with the standard set by another expert observer who previously viewed the same lesson segments. The co-investigator calculated the IOA by dividing the number of agreements by the sum of the agreements and disagreements before multiplying by 100 (Bakeman & Gottman, 1997).

<table>
<thead>
<tr>
<th>Key</th>
<th>Student Behaviors</th>
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<tr>
<td>A</td>
<td><em>Engaged Activity</em> - The student is engaged in the subject matter motor task as described by the teacher.</td>
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<tr>
<td>C</td>
<td><em>Cognitive</em> - The student is engaged in a cognitive, subject matter task.</td>
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<tr>
<td>M</td>
<td><em>Management</em> - The student is engaged in a non-subject matter, managerial task.</td>
</tr>
<tr>
<td>W</td>
<td><em>Waiting</em> - The student is either waiting for another turn, further instructions, or an opportunity to respond.</td>
</tr>
<tr>
<td>I</td>
<td>Interim – The student is engaged in a non-instructional aspect of an ongoing subject-matter motor task.</td>
</tr>
<tr>
<td>F</td>
<td><em>Off Task</em> - The student is either not doing what he is supposed to be doing or doing what he is not supposed to do.</td>
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The results from the process established IOA at 97.2% agreement for the first segment, 85% agreement for the second segment, and 87.8% agreement for the third segment. The findings coincide with expert recommendations (Bakeman & Gottman, 1997) and previous research using similar methods to collect behavioral data from observed lessons in films (Sharpe, Hawkins, & Wiegand, 1999; Sharpe, Mavi, & Brown, 2002).

Data Analysis

The co-investigator analyzed films of all participants’ first and second invasion game lessons, and, using BEST, entered the data into SPSS for statistical analyses. A series of paired t-tests first analyzed the impact of participants’ (N=22) self-reflection of their lessons by viewing the filmed lessons and answering written questions with the intent of improving future lessons. The researcher utilized the Multivariate Analysis of Variance (MANOVA) with repeated measures to identify differences between groups for the five dependent variables following the two self-reflection treatments. A Pearson product-moment correlation analyzed any relationship between the gain teaching performance scores and the only statistically significant recruitment influence (life-long desire to teach physical education) maintained following the clinical teaching experience reported by Everhart and Everhart (2009). The Cross Tabs procedures in SPSS generated the correlation for data that included some non-parametric in nature (recruitment socialization influence).

Results

Student Time Differences for All Participants

Participants engaging in all parts of the study (N=22) viewed their own filmed lessons and answered reflective questions in preparation for improved, future lessons. The study included 37 participants; however, only 22 completed the two treatments in the Behavioral Pedagogy Laboratory following their micro-lesson peer teaching experiences and completed the recruitment socialization questionnaires. A series of paired t-tests analyzed each of the five dependent variables. The results for all participants indicated that a significant difference existed from the first lesson to the second for four of the five dependent variables (student cognitive time, student waiting time, student management time, and student interim time) regardless of treatment group (alpha was set at .05). From the first lesson to the second lesson, student engagement did not differ significantly for all participants. See Table 1 for a closer look at the results of the t-tests for all participants combined rather than according to the two treatment groups.
Table 1

Results from a Series of Paired t-Tests Analyzing All Participants’ Peer Student Behaviors in Two Lessons Each Regardless of Treatment Group

Student Behaviors | N | Means | Error | SD  | t   | df  | P-value |
--- | --- | ------ | ------ | ---- | ---- | ---- | -------- |
Engaged |   |       |       |      |     |     |         |
Eng 1    | 22 | 52.48 | 2.35  | 11.05 | 1.637 | 21  | .116    |
Eng 2    | 22 | 43.43 | 4.49  | 21.06 |       |     |         |
Cognitive |   |       |       |      |     |     |         |
Cog. 1   | 22 | 13.3  | 1.51  | 7.06  | -1.863 | 21  | .077    |
Cog. 2   | 22 | 17.5  | 2.49  | 11.66 |       |     |         |
Waiting |   |       |       |      |     |     |         |
Wait 1   | 22 | 10.8  | 1.72  | 8.07  | -2.728 | 21  | .013 *  |
Wait 2   | 22 | 23.53 | 4.04  | 18.94 |       |     |         |
Management |   |       |       |      |     |     |         |
Manage 1 | 22 | 4.18  | 1.9   | 8.9   | -2.174 | 21  | .041 *  |
Manage 2 | 22 | 9.14  | 1.09  | 5.12  |       |     |         |
Interim |   |       |       |      |     |     |         |
Interim 1| 22 | 20.58 | 1.72  | 8.07  | 6.123  | 21  | .000 *  |
Interim 2| 22 | 6.32  | 1.63  | 7.67  |       |     |         |

Student Time Differences By Treatment Group

An analysis of the results by treatment groups found only one of the five dependent variables improved for each of the treatment groups. Engaged time decreased from the first lesson to the second for both treatment groups. Cognitive time, waiting time, and management time increased for both treatment groups. The only dependent variable that improved in the second lesson for both groups was interim time. The decrease in interim time, associated primarily in these micro-lessons with students retrieving equipment that went astray within a learning activity or moving within the learning activity space outside of an instructional purpose, was not significantly different between groups. However, the
decrease for participants was dramatic. Interim time for Treatment 1 participants changed from 20.9% of the first round of micro-lessons to 9.2% in the second round of micro-lessons (difference of 11.7 percent). For Treatment 2 participants, the first round of micro-lessons generated a mean of 24.6% of interim time, while the second round of micro-lessons decreased to a mean of 2.88% of interim time (difference of 21.72%).

A Multivariate Analysis of Variance (MANOVA) with repeated measures determined if specific differences existed between groups for the five dependent variables (student engaged activity time, student cognitive time, student waiting time, student management time, and student interim time) following two self-reflection treatments. Results from the MANOVA, including the use of Wilks’ Lambda for post hoc testing to determine the existence of specific significant differences between groups, indicated no statistically significant differences between groups existed for any of the five dependent variables, F (1, 20) = .019, p < .892.

**Student Learning Time Variables and Recruitment Influence**

Investigators used a cross tabulation to determine the existence of a relationship between the gain teaching performance scores in the form of student behaviors and the only statistically significant recruitment influence maintained following the clinical teaching experience reported in research by Everhart and Everhart (2010). This allowed an analysis of the student behavior times with non-parametric scores using Pearson Product-Moment correlation. The consistent reason identified by recruits for pursuing teaching (life-long desire to teach physical education) was significant before and after the clinical teaching experience with multiple micro-lessons taught by preservice teachers (N=37) with self-reflections prior to subsequent lessons. The relationships remained strong before and after the clinical teaching experience (i.e., staying as a reason). However, participants indicating lower cognitive time in the micro-lessons (r = .599) demonstrated a strong negative relationship. That is, the less time students in micro-lessons spent in cognitive time, the greater the chance they indicated that teaching physical education was a life-long dream. No other student behavior gain score had a relationship with this significant recruitment reason. See Table 3 for correlation results between the student behaviors and recruitment influence reason of maintaining a life-long desire to teach physical education.

**Discussion**

The socialization process influencing recruits into the physical education profession and within the program is complex in that biography (Hutchinson, 1993; O’Bryant, O’Sullivan, & Raudensky, 2000; Schempp & Graber, 1992), the process of completing the preparation program, and early teaching practice (Curtner-Smith, 2007) may effect a role in the recruits’ reconceptualization of how to teach. To determine the level of influence of incorporating self-reflection as part of a preparation program’s early clinical teaching experiences, the researchers investigated (a) the impact of self-reflection on proxy student learning variables, with and without the use of software-based observation instruments and (b) the relationship of the difference in proxy student
learning from lesson-to-lesson to the socialization influence of having a life-long desire to teach physical education.

A comparison of student behaviors within this study with other related studies is not the intent of this study. However, that the proxy student learning behaviors did not improve in the subsequent micro-lessons for any of the variables except interim time following software-based and non-software-based self-reflection is of interest. The impact of the two treatment types (self-reflection with and without the use of software-based systematic observation) may result in a possible cause for concern. However, an explanation of the circumstances and efforts of the participants provides support that positive outcomes resulted from the self-reflection process for both treatment groups. Twelve minute micro-lessons may demonstrate a great deal of organization and instructional tendencies of preservice teachers (Graham, Soares, & Harrington, 1983; Landin, Hawkins, & Wiegand, 1986; Paese, 1986; Sharpe, Mavi, & Brown, 2002), yet the student learning behaviors’ percentage of lesson duration may look very different than percentages generated in longer lessons. Inferences drawn from results depend on the outcomes generated. For example, the amount of time participants spent waiting for another turn or responding in subject matter motor tasks increased substantially within the 12-minute micro-lesson, but a 45-minute lesson may not achieve the substantial differences between the two lessons.

Changes in the structure of the second micro-lessons as compared to the first indicate that participants took the reflection opportunities seriously. With longer lesson time, student learning-behaviors may improve. For example, the cognitive time students spend listening to teachers or watching demonstrations may decrease in percentage if the amount of cognitive time remains the same in total number of seconds for each episode of teacher instruction time (not including feedback). The number of minutes may increase when students are active in the subject matter motor tasks in longer lessons, and some of the other variables may decrease in percentage time: student waiting, student cognitive time, and interim time. Investigators anticipated student improvement in activity engagement in the second micro-lessons and a decrease in other student behavior variables. The process of students’ self-reflecting after teaching the micro-lessons may result in positive outcomes. An indication that pre-lesson thinking did not change due to the self-reflection process may result in no major changes from lesson to lesson and cause concern. The most important proxy variable for student learning among these variables is student-engaged time (the next best variable to ALT-PE, which indicates student success); however, the improvement in interim time indicates the participants reflected on the subsequent lessons. Within the 12-minute micro-lessons, preservice teachers devoted more time within single learning activities prior to transitioning to one or two other learning activities, if at all. Interim time occurs when students engage in non-instructional aspects of an ongoing activity such as retrieving an errant ball during a learning activity or drill. Interim time decreased, which indicates that the participants restructured their second micro-lessons to prevent students taking too much time to chase after balls or to transition more quickly to possession or non-possession by their team within a small-sided modified game serving as the learning activity. The other variables, student
management time, student cognitive time, and student waiting time may improve with longer lessons. Micro-lessons provide a way for teacher educators to determine if preservice teachers are more effective in subsequent clinical teaching experiences. Perhaps shorter micro-lessons provide more evidence of improving teaching behaviors such as corrective feedback and demonstrations than student behaviors, typically measured in duration rather than the event frequency used to measure teaching behaviors. Student learning behaviors are less discernable than improvement in rates per minute of corrective feedback within shorter micro-lessons and distinguishing possible teaching-learning patterns. Change occurred in this study demonstrating the fact that reflection probably occurred.

The primary intent of this study was not to compare time-mediated results with previous studies to determine how to generate improved student learning proxy variables of preservice teachers. The study demonstrated that neither treatment group performed in subsequent lessons better than the other group. However, the statistically significant difference for all participants regardless of treatment group validates that change did occur from micro-lesson to micro-lesson and indicates pre-lesson reflection by the participants. A similar research process with 45-minute lessons may demonstrate improvement in student learning. The inclusion of teaching behaviors or teaching-learning patterns within the research process as some of the dependent variables may provide a clearer understanding of the impact of software-based self-reflection of preservice teachers in early clinical teaching experiences.

In previous published findings, having a life-long desire to teach physical education was the only influence recruits maintained following a clinical teaching experience which included film-based self-reflection (Everhart & Everhart, 2010). Results from this study indicate that the recruitment influence of a life-long desire to teach physical education had a strong, negative relationship to the difference in cognitive student time in the micro-lessons. Participants indicating a life-long desire to teach physical education may spend less time in subsequent micro-lessons talking to students or providing demonstrations apart from activity engagement. The recruitment socialization literature highlighted the pre-conceived beliefs of recruits going into physical education preparation programs (Doolittle, Dodds, & Placek, 1993; Hutchinson, 1993; Schempp & Graber, 1992), the importance of a positive connection with faculty (Zeichner & Tabachnick, 1981), and the need for appropriate supervision of clinical teaching and student teaching experiences (Dodds, 2005; O’Bryant, O’Sullivan, & Raudensky, 2000).

Recent research reports that preparation programs can have an impact on influencing recruits to teach with student learning as a major goal (Curtner-Smith, 2007; Curtner-Smith & Sofo, 2004; Stran & Curtner-Smith, 2009; Everhart & Everhart, 2010). Results from this study underscore the potential of self-reflection on producing change in clinical teaching of preservice teachers, regardless of the use of software as a part of that process. The results on the student learning proxy variables illustrate that as preservice teachers think about how to improve, subsequent lesson changes can happen. The negative relationship between cognitive time and the recruitment influence of wanting to teach physical education since childhood indicates that early clinical teaching
experiences with self-reflection provide additional positive influence to recruits and their pre-conceived models for teaching physical education. The preparation program as a whole is a major influence for reshaping more custodial models of recruits or those with less than effective teaching patterns and goals. Including a clinical teaching requirement with guided self-reflection is an important part of preparation programs. For future consideration, longer clinical lessons may allow additional research on the impact of software-based self-reflection prior to subsequent clinical teaching.
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